REMARKS/ARGUMENTS

REMARKS

The examiner objected to Claims 25-29 under 37 CFR 1.75(c) as improper for lack of antecedent basis for reference to "said second time clock". The examiner rejected claims 14, 17 and 29-31 under 35 U.S.C. 1 02(e) as anticipated by Shiomoto et al. (U.S. Patent No. 5,917,873). The examiner rejected claims 25-31 under 35 U.S.C. 1 03(a) as being unpatentable over Shiomoto et al. (U.S. Patent No. 5,917,873) in view of Youngberg (U.S. Patent No. 5,805,530).

Applicants have hereby cancelled claims 14, 17 and 25-31 and submitted new claims 32 - 42. New claims 32-42 overcome the objections and rejections cited in the office action. It is therefore respectfully submitted that new claims 32 - 42 are allowable. Allowance of the new claims is therefore earnestly solicited.

TRAVERSAL OF THE REJECTIONS

Program Processing Functions

Applicant's claims are directed to scheduling and initiating "program processing functions". Applicant's specification provides examples of "program processing functions" including program display, recording or playback. (See applicant's specification page 2 lines 33-35). These are functions scheduled by a user via the EPG for a user selected program from the EPG display.

First and Second Time-of-Day Clocks

The time for tuning to the program source when the user scheduled time for the program arrives is determined by a first time-of-day clock referenced to a stored program schedule. After tuning, the processor receives information from the tuner and provides a second time-of-day clock based upon the received current time reference information.

The second time-of-day clock is derived from the received time reference information. It is this second time-of-day clock that is used to time the initiation of the user selected program processing function, for example, recording a program. Therefore, the time-of-day clock used for scheduling tuning to the selected program source can indicate a different time from the time-of-day clock used to initiate recording of the user selected program on a recording device.

None of the prior art references, taken alone or in combination, disclose a first time-of-day clock for timing a tuner in accordance with a stored program schedule and a selected program; and a second time-of-day clock for initiating a user selected processing function, such as program recording, for the selected program.

According to applicant's specification page 6 lines 12-19, the timing information decoded from the MPEG transport stream is converted by a decoder "to a time clock (e.g.) United States east coast time and date) for establishing a time-of -day and date of the future transmission of a program by the broadcaster of the program. This [time-of-day] clock is useable for initiating scheduled program processing functions..." Thus, applicant's specification contains support for a derived time clock, i.e., a second time-of-day clock, derived subsequent to tuning to the program previously selected by the user, e.g., for recording or display. The internal system clock, i.e., a first time-of-day clock, is the clock from which the time for tuning was determined.

Yoshinobu

Yoshinobu is concerned with "providing a program information display method for displaying a **program schedule** [i.e., a program guide] on a display screen by using program information broadcast by the program information broadcasting system..." (Column 2 line 46).

In the first office action received in this case, page 3, 1st paragraph, of the office action states "Yoshinuba discloses that the processor derives a time clock based on a current

time reference (column 9 lines 17-21) and is used to initiate scheduled processing functions for programs (column 9, lines 35-44).

The cited text in column 9 of Yoshinobu describes, " A receiving device [line 33] comprising...a program information extraction means for extracting...scheduled program information [line 38]...means for generating program schedule data [line 46]...and a display control means for displaying a program schedule based on the program schedule data generated by the program schedule data generation means [lines 52 - 54].

There is no reference in the cited text to initiating "program processing functions" as recited in applicant' s claims. The term "program processing function" is defined in applicant's specification, page 2 lines 33-35, and elsewhere in applicant's specification. The term refers to functions such as recording, playback and viewing.

In contrast, **Yoshinobu refers to extracting scheduled "program information"**. The terms are readily distinguishable. "Program information" is defined by Yoshinobu to mean "the contents for each of the broadcasting programs...[used for] forming information for program schedules" (Column 2 lines 60-65).

Therefore, Yoshinobu's "user request for displaying the program schedule" is entirely different from applicant's "initiating a scheduled program function."

The office action further states Yoshinobu discloses "deriving a time clock" and "updating a stored scheduling time clock". Youshinuba fails to disclose a time clock of any type. Instead, Yoshinuba refers to stored times. (column 29, lines 65-67 and Column 30 lines 1-5). Specifically, the cited specification states, "...the broadcasting time is confirmed again by the scheduled program information for the channel...Then if the broadcasting time is changed to the later time, the broadcasting start time and the broadcasting end time of the reserved program are changed to those in the scheduled information and registered being updated in the memory.

Thus, there is no reference in the cited text to a **"clock".** A clock is a means for counting time, i.e., a timer. A start time and an end time stored in memory is not a clock. Such times are references to be compared to a clock to determine when the referenced time has arrived. Accordingly, the schedule clock is the timer against which stored scheduled times are compared to determine if the scheduled time has arrived. Updating the scheduled times stored in memory is not updating a clock.

Shinn

Shin describes adjusting program record and start times to accommodate different geographical time zones. "if the broadcasting signal transmitting region is located in the region in which the time difference occurs, the microcomputer 15 reads a time difference adjusting between the broadcasting signal transmitting and receiving regions **and adds the reserved program recording start time and reserved program recording completion time and the time difference adjusting data, set a newly reserved program recording start time and reserved program recording completion time,** and stores the time data into the memory such as an EEPROM"

Therefore, Shinn merely adjusts the reserved program times. Shinn lacks any disclosure or suggestion of updating a timer or a time clock to which the reserved program times are compared.

Williams

Likewise, Williams merely addresses adjusting stored times and fails to describe updating the clock to which the stored times are compared.

Shimoto et al.

The examiner also notes that according to the specification of Shimoto et al., the MPEG video decoder 12 is controlled by the clock in the PLL circuit (see Column 11, Lines 3-

7), and that the PLL circuit is used to determine a derived clock time based on the PCR time stamp sent from the broadcast stream (see Column 2, Lines 12-16).

However, derived clock time referred to in Shimoto is not a time-of-day clock. Rather it is a time reference indication used to synchronize the System Time Clock (STC) of the encoder on the transmit end with the STC of the decoder on the receive end of a transmission. Shimoto's specification Column 11 lines 66-67 and Column 12 lines 1-2 explains, "The phase comparing portion 53 compares the value of the PCR detected from the bit stream with the value of the STC of the STC counter 52 and obtains a phase difference. And further in Column 12 lines 36-39 Shimoto explains, "In the control stage, when the phase difference ...becomes excessively large, the PCR extracting circuit 51 loads the value of the PCR at the next time as the value pcr(0) to the STC counter 52 so as to re-designate the target value and control the PLL." The time represented by such phase differences could be expected to be on the order of fractions of microseconds.

In contrast, applicant's derived time-of-day clock consists of "both a date and a time and comprises year, month, day and time of day." (See applicant's specification page 10 lines 25-28.)

Claims 25-31 are rejected under 35 U.S.C. 1 03(a) as being unpatentable over Shiomoto et al. (U.S. Patent No. 5,917,873) in view of Youngberg (U.S. Patent No. 5,805,530). Shiomoto discloses a selection means for selecting a desired program produced bya broadcast source (see element 5 in Figure 1 and Column 4, Lines 12-13).

CONCLUSION

Applicants have invented novel and unobvious systems and methods for time of day clocks used for scheduled program processing functions which are neither taught nor suggested by the art of record. The art cited by the Examiner but not applied to reject the claims has been considered, and it is respectfully submitted that it also neither anticipates nor renders obvious the claimed invention. A prompt notice of allowance is therefore

respectfully requested. Please charge any fee associated with this matter to Deposit Account No. 07-0832.

Respectively submitted,

September 11, 2003

Jeffrey M. Navon, Reg. No. 32,711